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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,621	03/24/2004	John Chi Hee Kwok	9265USA-NONP	4612
7590	10/19/2006		EXAMINER	
Suzanne Kikel NOVA Chemicals Inc. 400 Frankfort Road Monaca, PA 15061			NUTTER, NATHAN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,621	KWOK ET AL.	
	Examiner	Art Unit	
	Nathan M. Nutter	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 September 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,930,150), taken with Wang et al (US 5,852,124).

The reference to Kim (US 6,930,150) teaches the modification of polyolefin resins with a styrene-maleic acid copolymer that may, itself, be modified. In Kim, note column 5 (lines 15-36) which teaches the inclusion of polybutene, which at column 6 (lines 58-60) may be added to other polymers including, at column 8 (lines 31-60), styrene-maleic anhydride polymers which may be functionalized.

The reference to Wang et al shows the rubber modified styrene-maleic anhydride as herein recited and claimed, for modification of other thermoplastic resins as an impact modifier. Note column 2 (lines 23 et seq.), column 3 (lines 9-33) and column 8 (lines 40-65) for the use with other polymers. The polymers listed therein contain many that are disclosed by Kim at column 9 (lines 50 et seq.). As such, the use thereof in a polybutene composition would have been an obvious modification to an artisan at the time the invention was made. All other characteristics and physical features would have been obvious to a skilled artisan desirous of particular qualities for end-use. Further, the

method of producing the composition, as recited herein, entails steps conventional to the art.

Response to Arguments

Applicant's arguments filed 14 September 2006 have been fully considered but they are not persuasive.

With regard to the rejection of claims 1-24 under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,930,150), taken with Wang et al (US 5,852,124), applicants argue that "the anhydride of the SMA copolymer of the subject invention does not contain 5% by weight of an anionic group and does not need to contain 5% by weight of an anionic group," as would be required if the SMA were component A of the reference. This may be so except that the reference clearly shows the SMA to be without anionic groups since it may be present as component B. Note column 10 (lines 55-58). As regards the polybutene as being component A, as disclosed at the paragraph bridging column 9 to column 10, the presence of anionic groups as low as "five percent by weight" is not excluded by the language of the instant claims. It is pointed out that this reference could be applied alone under 35 USC 103 since essentially all parameters are taught or suggested in the confines of the reference. With regard to the disclosure of Wang et al as to the employment of a rubber modified styrene/acrylonitrile or methacrylate/maleic anhydride terpolymer, it is pointed out that the instant claims do not exclude a terpolymer, and the definition is met. While the reference to Wang et al is not drawn to the modification of polybutene, per se, it is drawn to the manufacture of an impact modifier essentially within the confines of that

employed. The reference to Kim shows essentially what is recited. The rejection was made under the auspices of 35 USC 103, not under 35 USC 102. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

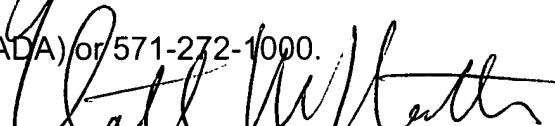
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmm

16 October 2006